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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--------------------------------------|----------------------|---------------------|------------------|
| 10/501,813 | 04/05/2005 | Toshio Narita | 042393 | 6606 |
| | 7590 08/14/200 I, HATTORI, DANIEL | EXAMINER | | |
| 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036 | | | WONG, EDNA | |
| | | | ART UNIT | PAPER NUMBER |
| | • | | 1753 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/14/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | |
|-----------------|---------------|--|
| 10/501,813 | NARITA ET AL. | |
| Examiner | Art Unit | |
| Edna Wong | 1753 | |

| | Edna Wong | 1753 | |
|---|---|---|--|
| The MAILING DATE of this communication | n appears on the cover shee | t with the correspondence add | lress |
| THE REPLY FILED 02 August 2007 FAILS TO PLACE | • • | · · | |
| 1. The reply was filed after a final rejection, but prior this application, applicant must timely file one of the places the application in condition for allowance; a Request for Continued Examination (RCE) in continued periods: | to or on the same day as filing and following replies: (1) an ame (2) a Notice of Appeal (with app | a Notice of Appeal. To avoid abandment, affidavit, or other evidented leal fee) in compliance with 37 C | nce, which FR 41.31; or (3) |
| a) The period for reply expires 3 months from the ma | ling date of the final rejection. | | |
| b) The period for reply expires on: (1) the mailing date no event, however, will the statutory period for reply Examiner Note: If box 1 is checked, check either both TWO MONTHS OF THE FINAL REJECTION. See | r expire later than SIX MONTHS fro ox (a) or (b). ONLY CHECK BOX (b MPEP 706.07(f). | m the mailing date of the final reject) WHEN THE FIRST REPLY WAS F | ion. FILED WITHIN |
| Extensions of time may be obtained under 37 CFR 1.136(a). In ave been filed is the date for purposes of determining the per under 37 CFR 1.17(a) is calculated from: (1) the expiration dat set forth in (b) above, if checked. Any reply received by the Ofmay reduce any earned patent term adjustment. See 37 CFR NOTICE OF APPEAL. | iod of extension and the correspond e of the shortened statutory period fice later than three months after th | ding amount of the fee. The appropr for reply originally set in the final Offi | iate extension fee ice action; or (2) as |
| The Notice of Appeal was filed on A brief filing the Notice of Appeal (37 CFR 41.37(a)), or a a Notice of Appeal has been filed, any reply must AMENDMENTS | ny extension thereof (37 CFR 4 | 11.37(e)), to avoid dismissal of the | |
| | action but prior to the data of f | iling a brief will not be entered b | |
| 3. The proposed amendment(s) filed after a final rej (a) They raise new issues that would require fu (b) They raise the issue of new matter (see NO (c) They are not deemed to place the application | rther consideration and/or seard TE below); | ch (see NOTE below); | |
| appeal; and/or | | | 110 100000 101 |
| (d) They present additional claims without cand NOTE: (See 37 CFR 1.116 and 41 | | of finally rejected claims. | |
| 4. The amendments are not in compliance with 37 C | CFR 1.121. See attached Notice | e of Non-Compliant Amendment | (PTOL-324). |
| 5. Applicant's reply has overcome the following rejection.3. Newly proposed or amended claim(s) would be a proposed. | • • ——— | a separate, timely filed amendme | ent canceling the |
| non-allowable claim(s). | | | - |
| 7. For purposes of appeal, the proposed amendmen how the new or amended claims would be rejecte. The status of the claim(s) is (or will be) as follows: | d is provided below or appende | or b) 🖄 will be entered and an o | explanation of |
| Claim(s) allowed: Claim(s) objected to: | | | |
| Claim(s) rejected: <u>1,2 and 6</u> . Claim(s) withdrawn from consideration: | | | |
| AFFIDAVIT OR OTHER EVIDENCE | | | |
| 3. The affidavit or other evidence filed after a final ac because applicant failed to provide a showing of was not earlier presented. See 37 CFR 1.116(e). | good and sufficient reasons why | the affidavit or other evidence i | s necessary and |
| 9. The affidavit or other evidence filed after the date entered because the affidavit or other evidence fa showing a good and sufficient reasons why it is not approximately approxim | iled to overcome <u>all</u> rejections recessary and was not earlier pr | under appeal and/or appellant fa esented. See 37 CFR 41.33(d)(| ils to provide a 1). |
| 10. ☐ The affidavit or other evidence is entered. An exp REQUEST FOR RECONSIDERATION/OTHER | planation of the status of the cla | aims after entry is below or attac | nea. |
| 11. The request for reconsideration has been consideration has been consideration. | ered but does NOT place the a | pplication in condition for allowa | nce because: |
| Note the attached Information Disclosure Statem Other: | nent(s). (PTO/SB/08) Paper No(| (s) | |
| | | Somewhy | |
| | | Edna Wong Primary Examiner | |

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ADVISORY ACTION

Response to Amendment

This is in response to the Amendment After Final dated August 2, 2007. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Claim Rejections - 35 USC § 103

Claims **1-2 and 6** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Castonguay** (US Patent No. 3,857,683) in combination with **Phillips** (US Patent No. 3,704,211).

The rejection of claims 1, 2 and 6 under 35 U.S.C. 103(a) as being unpatentable over Castonguay in combination with Phillips is as applied in the Office Action dated May 18, 2007 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that nothing in Castonguay and Phillips teaches or suggests how such a high-Re-content alloy film is obtained.

In response, the Examiner maintains that Castonguay and Phillips teaches the method step of present claim 1:

performing an electroplating process using an electroplating bath which contains an aqueous solution including:

a perrhenate ion in a concentration of 0.1 to 8.0 mol/L; at least one ion selected from the group consisting of nickel, iron, cobalt

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and chromium (III) ions, in a total concentration of 0.005 to 2.0 mol/L;

at least one of a Li ion and a Na ion, in a total concentration of 0.0001 to 5.0 mol/L; and

at least one organic acid selected from the group consisting of carboxylic acid, hydroxycarboxylic acid and amino acid, in a concentration of greater than 5.0 to 15.0 equivalents to the concentration of all of said metal ions, wherein said electroplating bath has a pH of 0 to 8, and a temperature of 10 to 80°C.

This method step forms the high-Re-content alloy film which contains Re at 98% or more by atomic composition.

This method step is taught by the combination of Castonguay and Phillips, e.g., 4.5-5.5 g/l Na (= 0.20 to 0.24 mol/l Na) [Phillips, col. 4, line 43] in the bath of Example XXIII (Castonguay, col. 9, lines 21-36).

This method step does not distinguish the method over the prior art because:

- (a) Similar processes can reasonably be expected to yield products which inherently have the same properties. *In re Spada* 15 USPQ 2d 1655 (CAFC 1990); *In re DeBlauwe* 222 USPQ 191; *In re Wiegand* 86 USPQ 155 (CCPA 195);
- (b) If the composition is physically the same, it must have the same properties;
- (c) A preamble is not necessarily accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. *In re Hirao* 535 F. 2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie* 187 F 2d 150, 152, 88 USPQ 478, 481 (CCPA 1951);

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(d) The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by the Applicants. *In re Linter* 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), *cert. denied*, 500 US 904 (1991); and MPEP § 2144.; and

(e) The claims attempt to define the subject matter in terms of the result to be achieved, which merely amounts to a statement of the underlying problem, without providing the technical method features necessary for achieving this result.

Applicants state that in Example XXIII, Castonguay further describes: "By varying the rhenium content in the bath from 3 to 80%, the rhenium content in the deposit may be varied from 25 to 95%" and in Example XLV, Castonguay further describes: "By varying the rhenium content in the bath from 6 to 98%, the rhenium content in the deposit may be varied from 75 to 95%."

In response, these statements does not change the method step of present claim

1:

performing an electroplating process using an electroplating bath which contains an aqueous solution including:

a perrhenate ion in a concentration of 0.1 to 8.0 mol/L; at least one ion selected from the group consisting of nickel, iron, cobalt and chromium (III) ions, in a total concentration of 0.005 to 2.0 mol/L;

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at least one of a Li ion and a Na ion, in a total concentration of 0.0001 to 5.0 mol/L; and

at least one organic acid selected from the group consisting of carboxylic

acid, hydroxycarboxylic acid and amino acid, in a concentration of greater than 5.0 to 15.0 equivalents to the concentration of all of said metal ions, wherein said electroplating bath has a pH of 0 to 8, and a temperature of 10 to 80°C.

Furthermore, the concentrations of the ions and the organic acid taught by

Castonguay and Phillips overlap with the concentrations of the ions and the organic acid
in the method step of present claim 1.

Applicants state that in Castonguay, weight percentage is used.

In response, mol/L is used in the method step of present claim 1, and g/l is used in the method of Castonguay and Phillips.

Applicants state that Castonguay cannot obtain high-Re-content alloy containing Re at 98% or more.

In response, inoperativeness of a reference is not established by merely showing that a particular disclosed embodiment is lacking in perfection does not establish non-obviousness. *Ex parte Allen* 2 USPQ 2d 1425 (BPAI 19870; *Decca Ltd. V. United States* 191 USPQ 439 (Ct. Cl. 1976); *Bennett v. Halahan* 128 USPQ 398, 401 (CCPA 1961).

Furthermore, the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by the Applicants. *In re Linter* 458 F.2d 1013, 173 USPQ

560 (CCPA 1972); *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), *cert. denied*, 500 US 904 (1991); and MPEP § 2144.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EW August 10, 2007